

MR. MEEHAN stated that it is a fact well-known to most of us, that the *Wisteria sinensis*, as we find it cultivated, rarely produces fruit. The large seed vessels I now present are from a plant I have which bears abundantly. Why it does so I think may prove of interest to the members.

A few years ago Darron discovered motion in tendrils. Subsequently, in a paper published in our Proceedings, I showed that this motion required nutrition for its force, which was so much abstracted from growth. I explained by this what had hitherto been a mystery, why grapes grew more freely and healthy when running over trees, than when exhausting their vigor in fruitless motion to find something to cling to. I referred to many plants on which I had experimented, amongst others *Wisteria sinensis*; a plant was trained a few feet high and then left to support itself. It took all its food to fight gravitation. Since then it has continued to grow as a bush or small round-headed tree, unless a branch happens to extend to the ground, or a neighboring bush, when such branch will push forth with its old time vigor. In proportion as this plant has lost the power of growth, it assumes a reproductive power. This year from my little *Wisteria tree* I have gathered a half-peck of seed pods.

That weakened vigor is favorable to reproduction is well known to the horticulturist. Hence the operations of root pruning, transplanting, summer pruning, and ringing the bark. The novelty of this *Wisteria* incident is that an excessive draft on the force necessary to overcome gravitation in the ascending plant is also an enfeebling cause.

The facts I have given have a three-fold interest. To the structural botanist, enabling him to get specimens of fruit for examination hitherto hard to be obtained; to the horticulturist, furnishing him with the means of freely propagating a plant hitherto rather difficult to increase, and to the natural philosopher, furnishing an additional illustration of what I have hitherto advanced, *that growth in a great measure is a struggle with gravitation, requiring great efforts by the nutritive powers of the plant to sustain it.*

Dec. 8th.

The President, DR. HAYS, in the Chair.

Thirty-one members present.

Dec. 15th.

The President, DR. HAYS, in the Chair.

Thirty-four members present.

The following paper was presented for publication:

"On the seed vessels of *Forsythia*." By Thos. Meehan.

Mr. Cope offered the following resolution which was adopted:

Resolved, That the Academy of Natural Sciences present their thanks to Theophilus H. Turner, M. D., U. S. A., for his very valuable gift of the skeleton of the great extinct reptile, the *Elasmosaurus platyrurus*, from the neighborhood of Fort Wallace, Kansas.

Dec. 22d.

The President, DR. HAYS, in the Chair.

Thirty-four members present.

[Dec.

The following papers were presented for publication :

"Remarks on some new types of Carboniferous Crinoidea, with descriptions of new forms." By F. B. Meek and A. H. Worthen.

"Descriptions of seven new species of American Birds from various localities, with a note on *Zonotrichia melanotis*." By Geo. N. Lawrence.

"Analytical table of the species of *Baridius* inhabiting the United States." By John L. LeConte, M. D.

"The Gyrinidæ of America, north of Mexico." By John L. LeConte, M. D.

"Notes on the species of *Agonoderus*, *Bradycellus* and *Stenolophus* inhabiting America, north of Mexico." By John L. LeConte.

Dr. Leidy exhibited some photographs of fossil bones, received from Mr. W. E. Webb, Sec. of the National Land Co., at Topeka, Kansas. They represent vertebrae, and fragments of jaws with teeth, of a skeleton of *Mosasaurus*, reported by Mr. Webb to be about 70 feet in length, recently discovered on the great plains of Kansas, near Fort Wallace.

Dec. 29th.

MR. JOS. JEANES in the Chair.

Fifty-three members present.

The following gentlemen were elected members :

Albert Peale, Franklin Platt, Jr., Edw. A. Spooner, M. D.

The following were elected correspondents :

Geo. Neville, of Calcutta, E. I. ; Rev. Dr. Joseph F. Berg, of New Brunswick, N. J.

The Committee to which was referred a paper, entitled "Phosphorus and Fatty Degeneration," reported in favor of its publication in the *American Journal of Medical Science*.

On favorable report of Committees, the following papers were ordered to be published :

Notice of some remains of extinct INSECTIVORA from Dakota.

BY JOSEPH LEIDY.

Dr. Hayden, in his trip to the Mauvaises Terres of White River, Dakota, in the summer of 1866, discovered the remains of two genera of insectivorous mammals, which appear to be peculiar, but related to the hedge-hogs.

LEPTICTIS HAYDENI. This name, appropriate to one of the animals, is founded upon a nearly entire skull devoid of the lower jaw. The specimen belonged to a mature animal, as indicated by the complete and worn condition of the teeth ; but the skull retains most of its sutures as distinctly as is usual in the Opossums. It is less in size than that of the Mink, and its shape is more canine than musteline. It bears some resemblance in form to that of the insectivorous genus *Glisorex*, or to that of the viverrine genus *Eupleres*.

The cranium is remarkable for the possession of a pair of prominent ridges defining the upper part of the temporal fossæ, as in the fossil cranium represented by De Blainville (*Osteographie*, *Mustela*, pl. xiv) under the name of *Mustela plesictis* from Auvergne, and by Gervais (*Pal. Fran.* pl. 28, fig. 2) 1868.]